

# Welcome!

## Day One of the EMS Basin Study Stakeholder Consultation Series

### Our Path Today

:15	Welcome, Aims & Overview
:30	Context
:10	Brainstorm Adaptation & Mitigation Actions
:60	Small Groups: Common Strategies
:30	Whole Group: Identify Arenas of Strategies
:15	Next Steps & Close



### Today's Objectives

Ground ourselves in the aims of the EMS Basin Study Stakeholder team

Identify **adaptation** and **mitigation actions and strategies** to address water challenges

Group strategies into broader strategic arenas, and identify teams to dive deeper into strategies on Day 2

### Tomorrow's Objectives

Refine the strategies within the strategic arenas

Analyze the strategies to provide a better understanding of the options

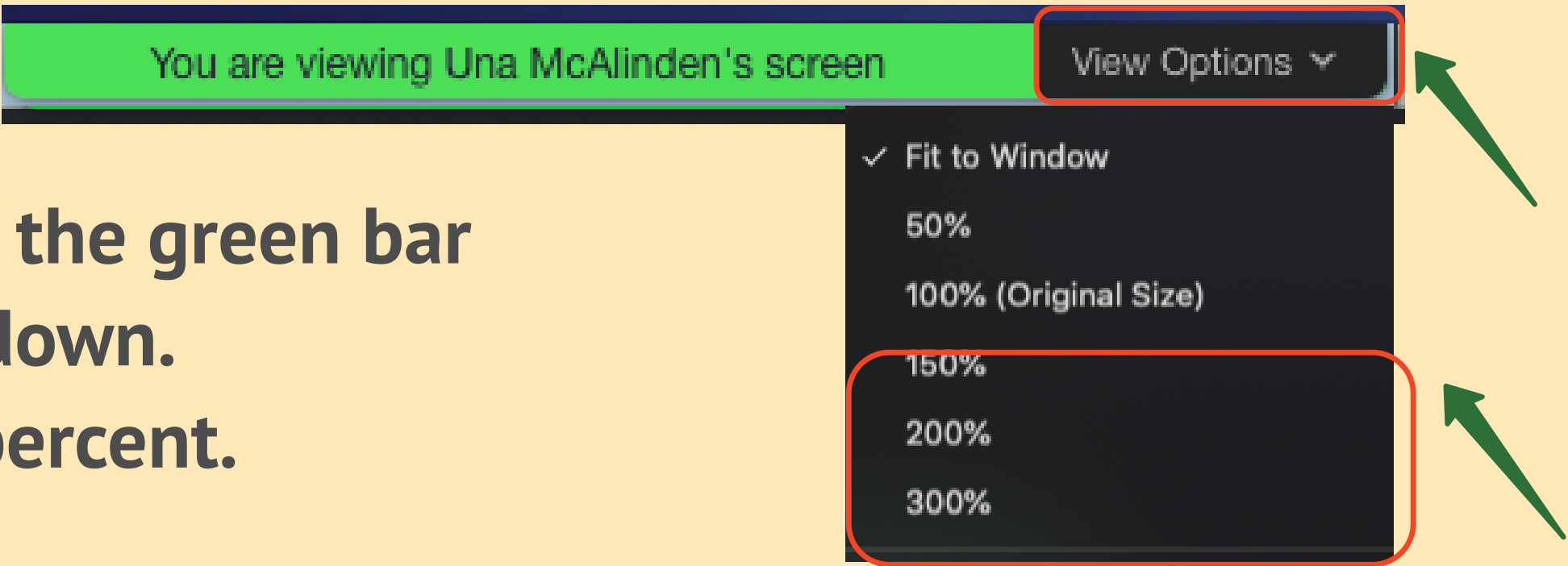
Explore next steps

**Please take a moment to sign in to the google doc linked in the chat!**

# How We'll Work Together

## Zoom Screen Share

At the top of your Zoom screen, find the green bar and select the "View Options" dropdown. Then click on your preferred zoom percent.



## Facilitation Team



Alisa Oyler  
Facilitator  
Phoenix, Az



Oscar Walters-Duran  
Facilitator, Planner  
SF Bay Area



Courtney Lonergan  
Facilitator & Trainer  
Phoenix, Az



Shelby Pierce  
Facilitator & Online  
meeting Producer  
Sioux City, IA

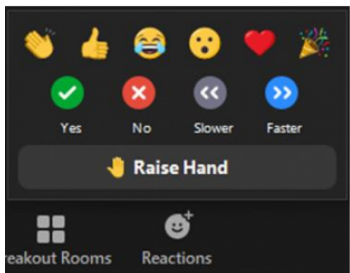


Eileen Pippins  
OD Consultant  
Oakland, CA



Rachael Mizuno  
Non-Profit  
Professional  
Chicago, IL

## How to Participate



**Raise your hand** - on camera by using the 'reactions' feature in zoom or by unmuting.



We will occasionally call on people to ensure multiple voices are heard.



Consider this an **invitation, not an obligation!**

## In Small Groups

You will be assigned a **facilitator** from the team to help lead the conversation and **scribe** your ideas in the Miro Board while screen sharing.



# Quick Group Check-In



*Introduce yourself and discuss the questions below.  
Share one hope for the session in the chat when you return.*

How do YOU define mitigation vs adaptation?

What are your hopes for today's session?

## Hopes for today?

Strategies to move forward, thoughtful ideas to analyze

Innovative, but practical long-term and sustainable strategies

Solutions that the Pinal communities can use to develop sustainable future

Practical, actionable solutions

hope to get a sense from participants what adaptation/mitigation means for development in this region

Capture ALL ideas - even those that seem not immediately practical

Consensus on three strategies

## Framing the Challenges: A Review and Discussion of Groundwater Modeling Results

Mitigation and Adaptation Brainstorming – Day 1  
5/17/21



# What specific actions can we take to adapt or mitigate water challenges in our region?

**Silently brainstorm your own answers.**

Try to list at least 10 specific, concrete actions that we could take individually or together.



Just before we return, identify your  
**3 most impactful and realistic** actions to pursue.

## Examples of **Mitigation**:

- Reduce agricultural groundwater pumping
  - Example: Provide incentives to reduce pumping when water levels reach 900 ft
- Reduce the level of involuntary fallowing
  - Example: Substitute high water use crops (e.g. Alfalfa) with low water use crops (e.g. Guayule) so more acres stay in production

## Examples of **Adaptation**:

- Decouple the municipal sector from the regional groundwater system
  - Example: Construct a CAP surface water treatment, reducing the reliance on groundwater to demonstrate an Assured Water Supply

# What specific actions can we take to adapt or mitigate water challenges in our region?

- Increased potential for subsidence
- Increased pumping costs
- Lower water quality
- Difficulty in using groundwater for demonstrating an Assured Water Supply
- Challenges in recovering stored water
- Insufficient pumping to meet agricultural demands (involuntary fallowing)



## Consider....

### WATER

- Augmentation
- Conjunctive use
- Conservation and efficiency
- Desalination
- Long term storage
- Recovery of stored supplies
- Recycling and reuse

### MANAGEMENT

- Collaborative opportunities
- Demand management
- Land fallowing and retirement
- Operational changes
- Urban runoff management
- Vegetation management
- Weather modification
- Wheeling agreements

### INFRASTRUCTURE

- Desalination
- Importation projects
- New conveyance and storage facilities
- Groundwater recharge facilities
- Rehabilitation or replacement of existing facilities

### LEGAL AND INSTITUTIONAL

- Legal and institutional changes
- Legislative changes
- Policy changes

### ECONOMICS

- Mitigation Scenarios
- Social
- Ecosystem Services
- Market and non-market water values



# What specific actions can we take to adapt or mitigate water challenges in our region?



## Find your workgroup

- In a moment, you will move into breakout rooms.
- You will have a **designated facilitator** to lead you through the conversation
- They will **share screen** and **scribe** into your workspace.
- Be ready to share the top 3 adaptation / mitigation actions from your list.

Group 1

Group 2

Group 3

Group 4

Group 5

Group 6

50  
minutes!

## INSTRUCTIONS FOR SMALL GROUPS

1. Round Robin: Each person introduce themselves and **share prioritized actions**.
2. As a group, discuss your ideas to **clarify**, enrich and deepen your thinking together
3. Write **10-15 agreed upon actions** on individual 'stickies' in 3 to 7 words
4. **Cluster** those actions by similar intent to identify common 'strategies'
5. Name each column as a recommended '**strategy**' to pursue
6. *Group* the cluster with its strategy to **copy it to the main clustering space**.
7. Choose a reporter ready to read out the 'strategies' to the whole group.

**Group 5**

*What specific actions can we take to adapt or mitigate water challenges in our region?*


10-15 actions

3-7 words

1 action per sticky

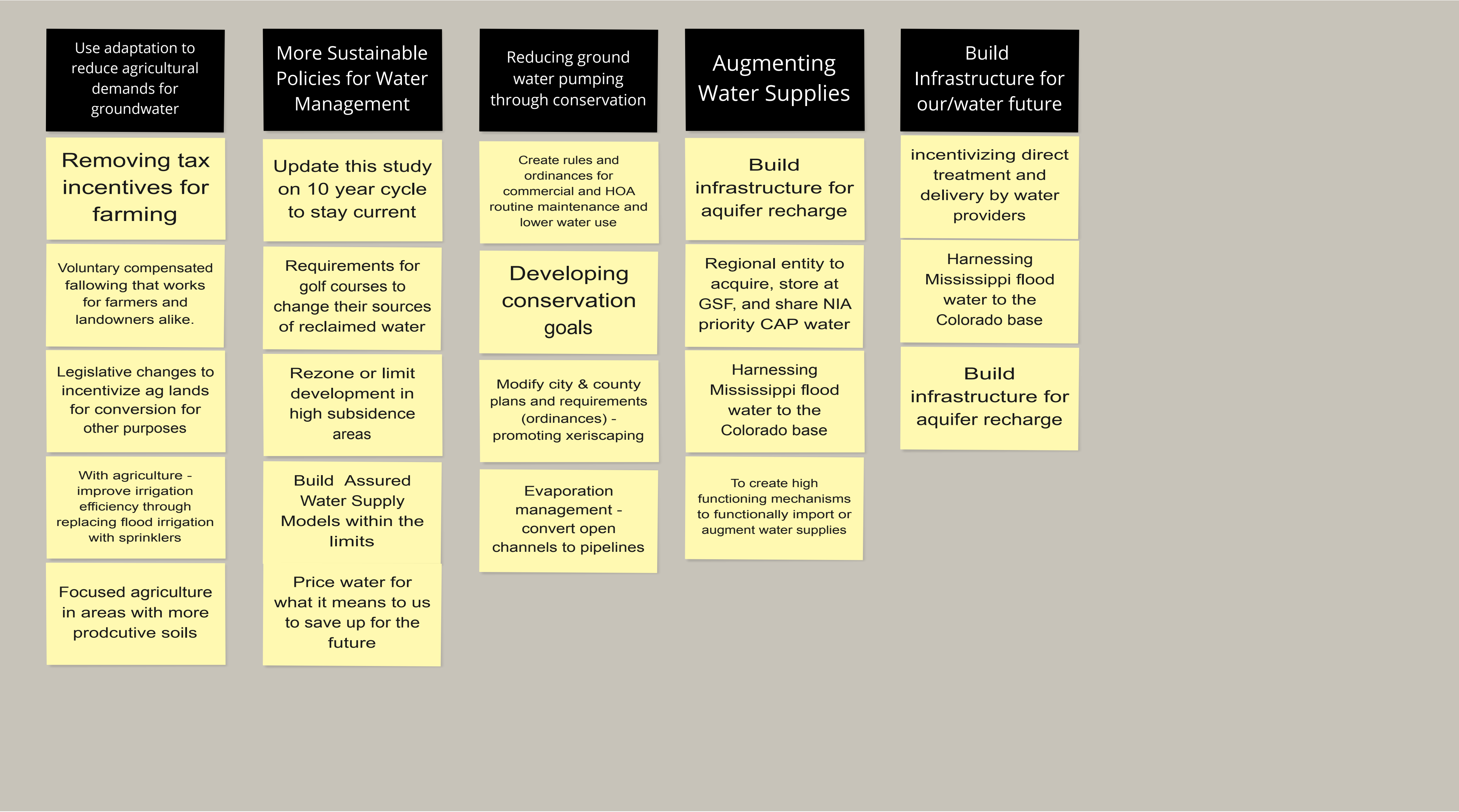
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# Group 1 – Nathan M., Jake, Tom, Fred S. Anthony S.

*What specific actions can we take to adapt or mitigate water challenges in our region?*



## INSTRUCTIONS

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3. Link those actions by similar intent to identify common 'strategies'
4. Name each column as a recommended 'strategy' to pursue
5. *Group* the columns with their strategy heading & COPY to the main clustering space.
6. Be ready to answer clarifying questions from the whole group.

Group 2– Terri Sue Rossi, Abe Springer, Deborah Tosline, Brad Hill, Lonnie Frost, Darrell Wilson

What specific actions can we take to adapt or mitigate water challenges in our region?



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# Group 3 – Rachael, Austin, Mitch, Aaron, Theresa, John, Heide

*What specific actions can we take to adapt or mitigate water challenges in our region?*

Find the Money	Land Management	Effluent Reuse	Aquifer health and Management	Municipal water management	Agricultural Adaptation	New Water Sources: bringing additional supply into the region
Regional grant request process	Fallowing (in state trust land and other areas)	Grey water for agriculture	Reduce the disconnect between recharge and pumping	Additional incentive programs for Residential Water usage	Conversion of half the Alfalfa to guayule	Ocean Desalinization
	require that new development occur on existing ag land	Implement direct use by the year 2035	Capture and store flood waters	Set aside No-growth areas (for development)	Develop new market for lower water use crops	transportation basins and system use agreements
		Direct Use of Non-potable (e.g., Irrigation (turf and non-food crops & Industrial use	Encourage removing/relocating inefficient wells	Luxury tax on high-usage activities/areas "Golf Courses"	agricultural Water efficiencies/ technologies example; Converting from sprinklers to drip systems	Finalize the tribal water settlement(s) 3 or 4
			Groundwater recharge	Smart growth/low impact development	Looking at agriculture and other export as a net loss of water from the region and how to plan for in	Import excess flood waters from the Mississippi to the Green River
						Cloud seeding
						Gila River watershed management

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# Group 4 – Craig, Keith, Kevin, Juliet, Shaina

*What specific actions can we take to adapt or mitigate water challenges in our region?*

invest in infrastructure to maximize existing water resources	optimize storm water	implement regulatory changes	importing alternative water supplies	create a market for AG pumping	research new technologies	change the crops to reduce the crop/water requirement
advanced ground water treatment - brackish and impaired	large scale rainwater- direct runoff to existing canals	eliminate all analysis in the Pinal county AMA - in ADWR model	find alternative water supplies - specifically desal- Mississippi River	reduce/cap agricultural use	invest in new technologies for water supply- air to water generation/solar power	changing the crops encouraging and incentivizing farmers to utilize more water efficient crops
direct potable re-use give developers a option to cost share in investment DPR	develop flood control infrastructure that enhances storm water infiltration (recharge)	provide a certificate of assured water	cloud seeding for water to fall where it is needed	set up a water market for agricultural users-		
build a recharge and recycling facility for the city's waste water treatment plant	low impact development	establish city ordinances that mitigate/require water conservation	seek willing leases who will lease/sell water - wheeling agreements			
deepen all wells						
look at direct potable re-use						
make it easier for different entities to share existing infrastructure- canals						

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Group 5 – Ben Paras, George Fletcher, Ken Seasholes, Valerie Swick

What specific actions can we take to adapt or mitigate water challenges in our region?

ID new water	Conservation	Ag Pumping Reduction	Water Reuse	Recharge facilities	Ag preservation	Retirement of ag lands
Develop process for wheeling agreements	Incentives for new residential development to reduce water use	lease ag following credits to reduce age pumping	Greater municipal recycling of water	Require CAGRD to replenish at the point where water is pumped	Drill more ag wells to reduce fallowing	Require retirement of Ag land for an AWS
Treatment plant to utilize impaired ground waters	Maximize multiple uses of same water in industry	Incentives to minimize high ag pumping areas	Direct potable reuse	More regional groundwater storage facilities	incentivize switch from high water usage crops to lower usage crops	Allow CAGRD to purchase and retire ag lands to replenish
Locate water to import	require highly efficient water use for industry	offer land swaps to relocate ag	Create wastewater plant that sends reused water out			Protection of stored water
Stormwater capture						Eliminate 4' decline criterion
Maximize rainfall harvesting by incorporating into local building codes						

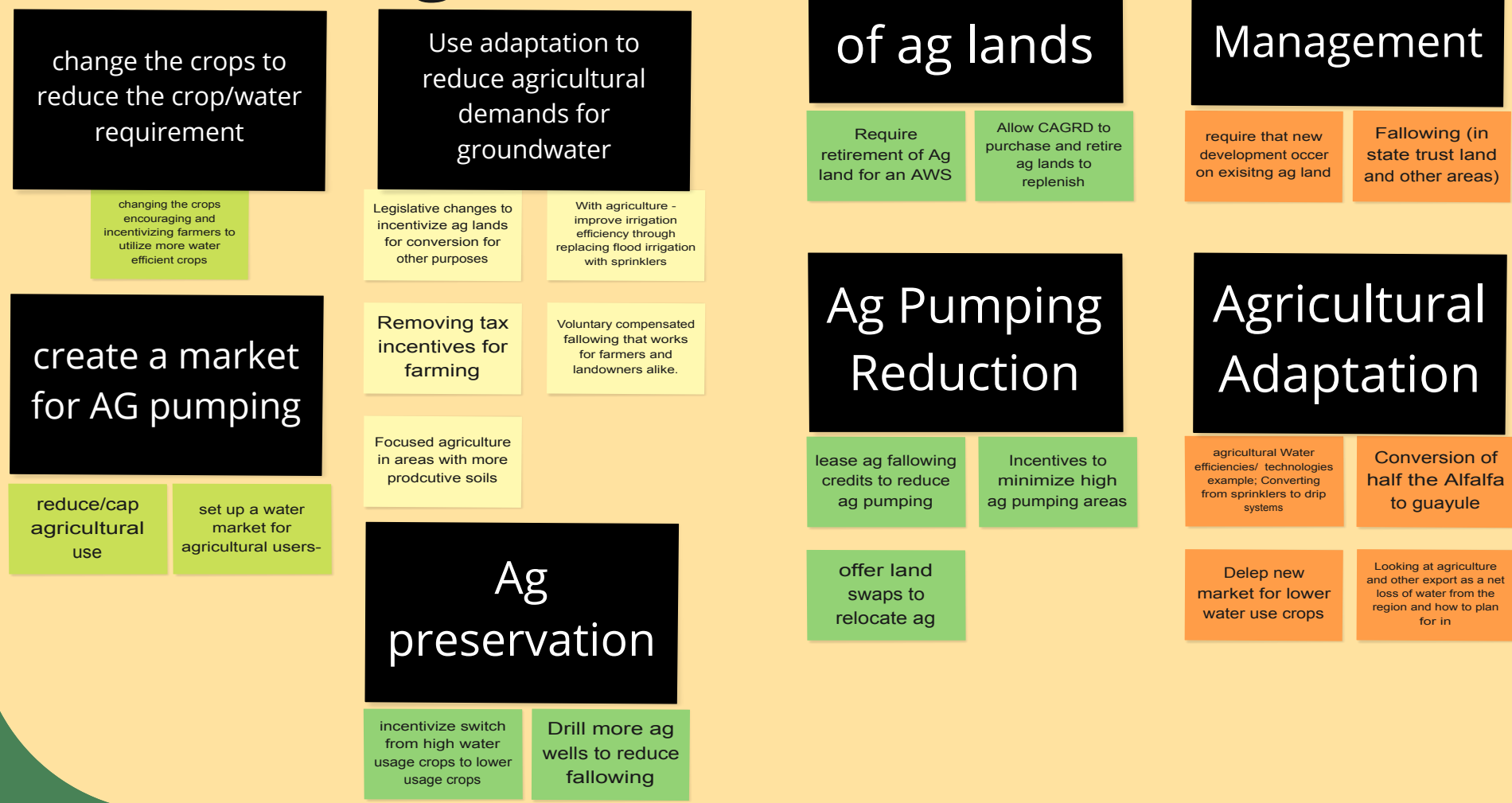
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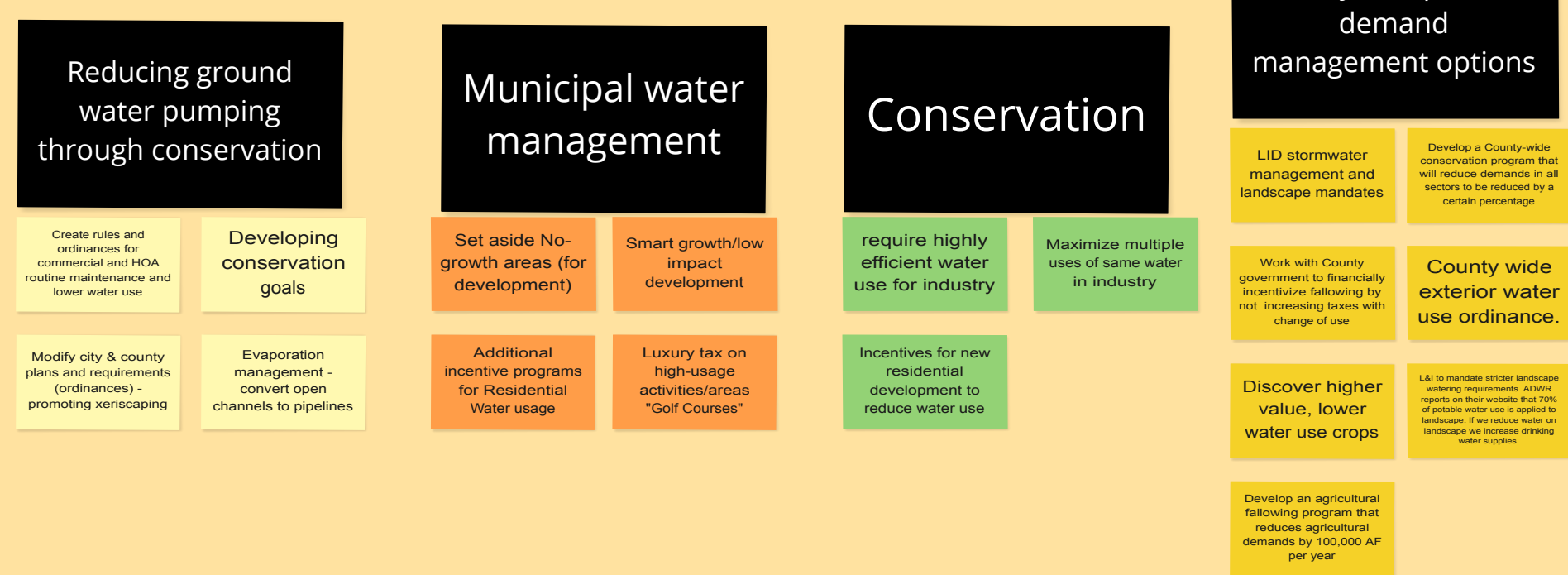


# STRATEGIC ARENAS: Alignments in our strategies.

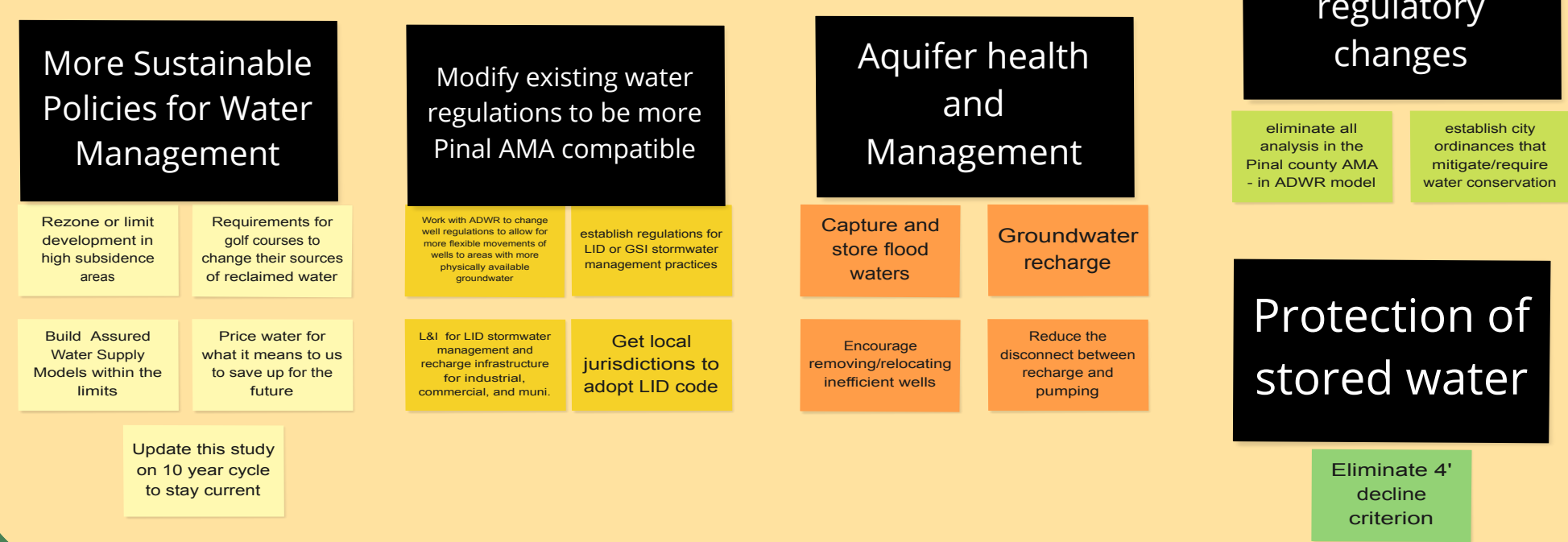
## Arena A: Agriculture



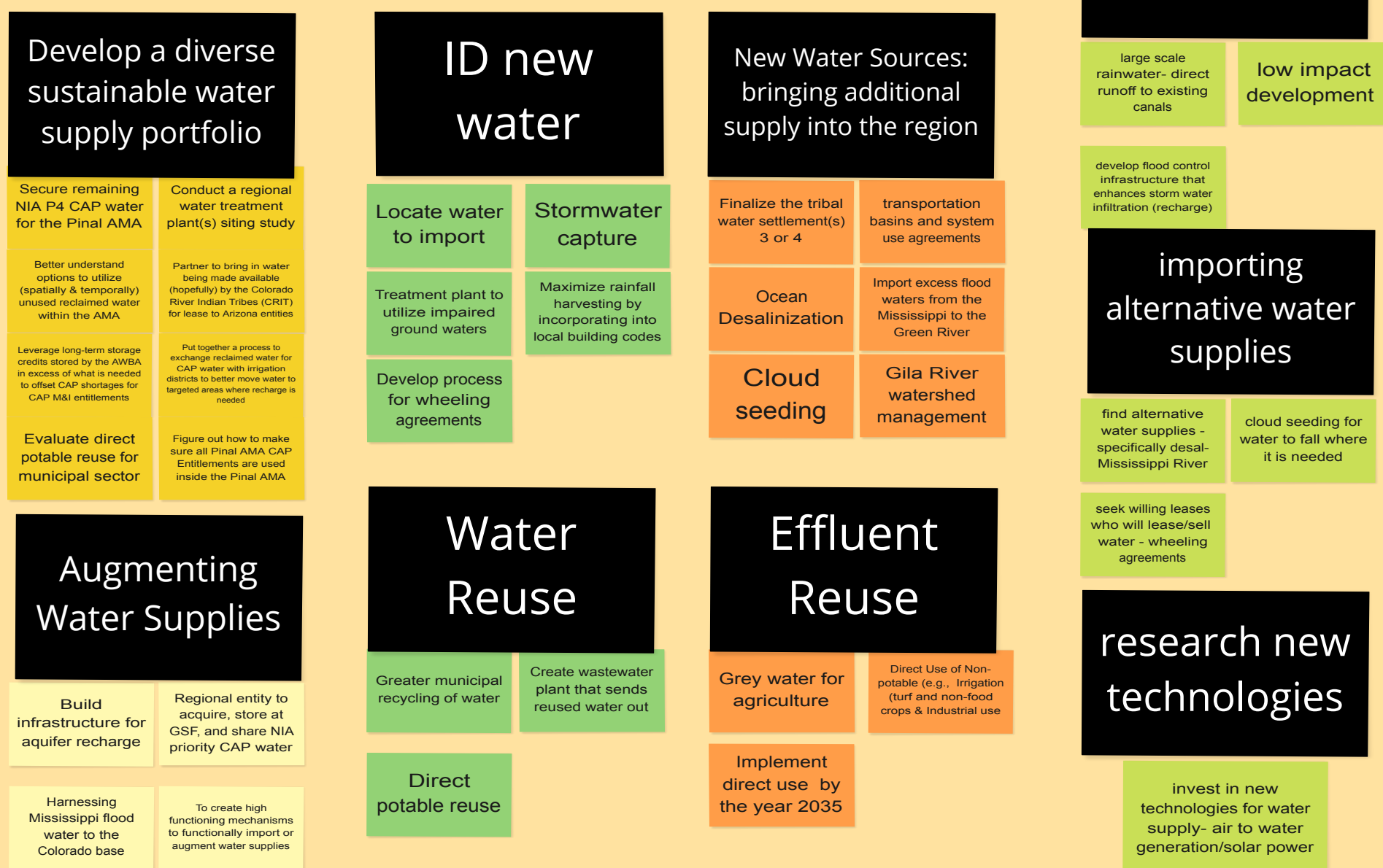
## Arena C: Conservation



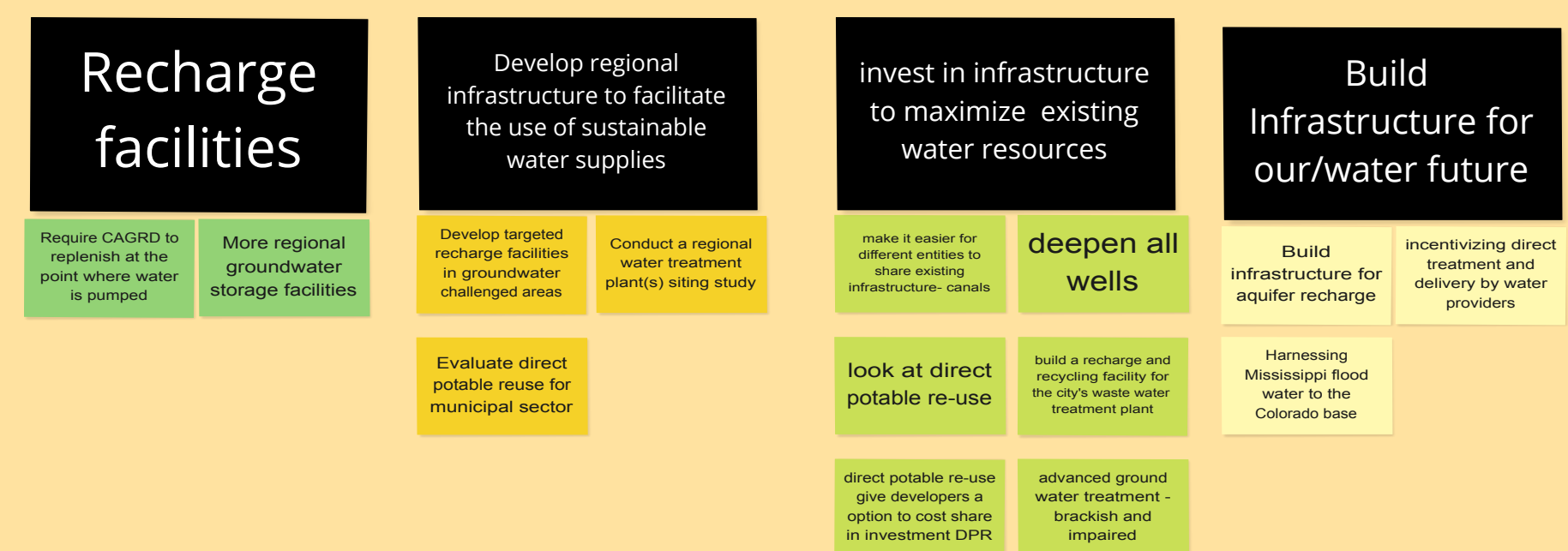
## Arena D: Regulations



## Arena B: Diverse Water Supply



## Arena E: Infrastructure



## Arena F: Funding



These arenas were formed from identifying the shared intent among the strategies proposed by the small groups. The arenas were formed around shared themes. Participants then signed up to work on refining these arenas further.



# At Tomorrow's Meeting

We'll work in small groups to **refine each arena**

- 1. Articulate **3 to 5 clear strategies** that merit pursuit within each arena
- 2. **Analyse & assess feasibility**, desirability and approach to implementation for each strategy
- 3. Explore **next steps** to move these forward



# Before you go...

Help us form groups for tomorrow!

Open up the sign in sheet to share your top two choices for strategic arena. (Link in the chat). You'll find space in the right column to enter two letters.

Feel free to reach out to others who would be helpful tomorrow and invite them to join.

### Stakeholder Consultation Workshops!

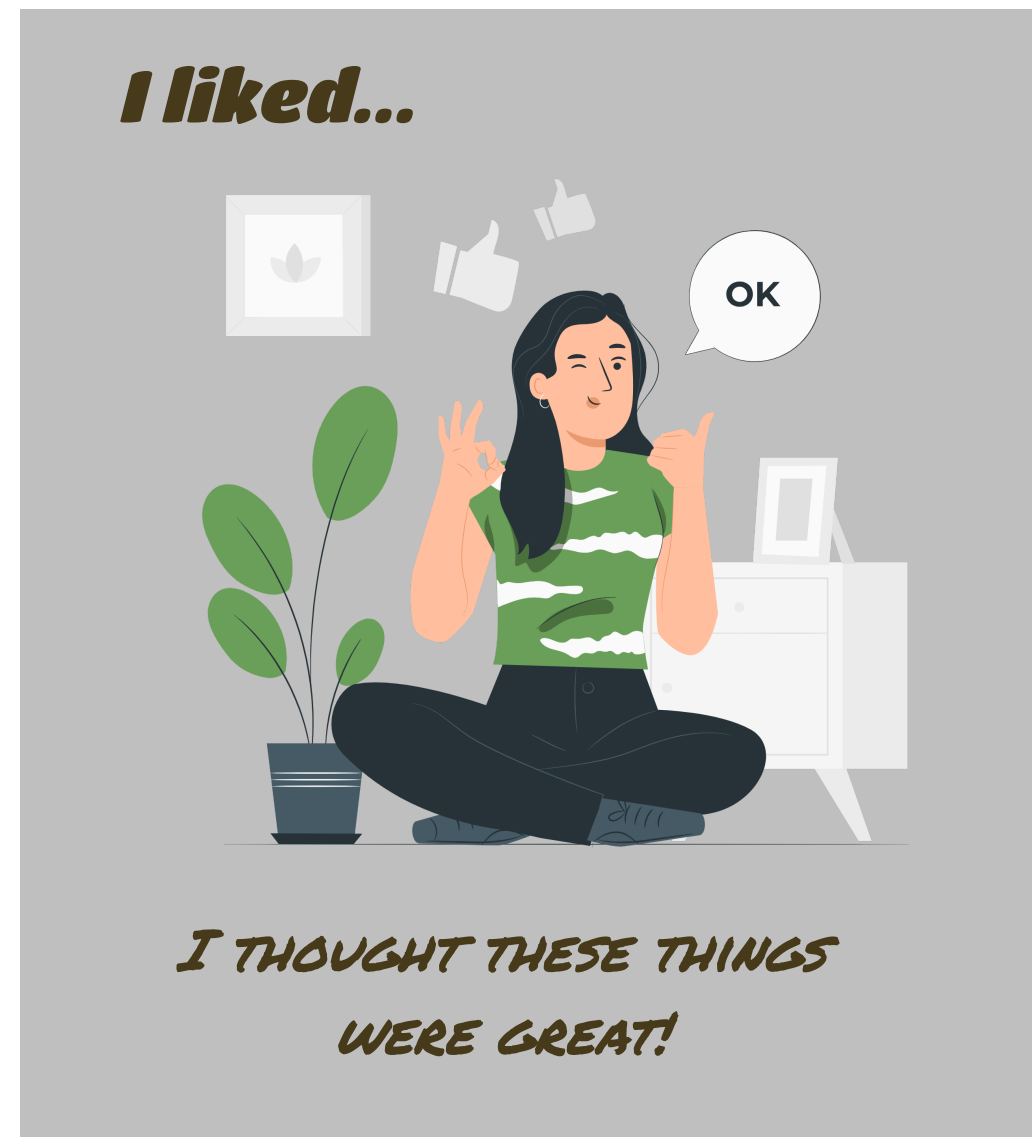
Arena B: Policy Strategies    Arena C: Regional Strategies  
Policy Strategies    Arena F: Local Infrastructure Strategies

	Email Address	A hope you have for these sessions	Your 2 Arena Choices
	oscarwd@email.com	To find solution to our water challenges	A, D

# A Reflection Waterfall

We want your feedback on today's session!

Type your response to "I Liked..." in the chat, **BUT DON'T HIT RETURN YET!**



- Terri Sue Rossi: the virtual board
- Mitch Basefsky: Sharing
- Shaina: good conversations
- Brad Hill: Impressive that you pulled this off virtually!!
- Valerie Swick, Reclamation: Great ideas being considered.
- Shelby Pierce: Group 2- thank you for your willingness to type your ideas into chat! So helpful!
- Fred Schneider: Excellent interaction and participation by everyone.
- Ken Seasholes: The breadth of ideas impressed me
- Jake Lenderking: great ideas! breaktime
- Rachael Mizuno (she/her) to Everyone : Group 3!
- Austin Carey: I enjoyed the opportunity to hear from every member of my group
- Tony Solano: it was great to hear all the ideas from everyone
- Ben Paras: I Liked the various ideas pooled from the breakout groups
- Aaron Dorman: I like the variety of ideas presented and was hoping too late



- Valerie Swick, Reclamation: I look forward to getting into the details tomorrow.
- Ken Seasholes: Process was good; I hope participation is expanded tomorrow
- Terri Sue Rossi: More time to see the work of other groups
- Aaron Dorman: I am hoping that people can group these by feasibility, or given valuations by those who affect policy
- Fred Schneider: A little longer break, say 15 minutes
- Ben Paras: I wish there was 1 or 2 more breaks :)
- Shaina: Smooth Miro
- Jake Lenderking: The zooming in and movement of the sticky notes could be improved. It was hard to follow at times